



K20

Remote Keyless Entry System

- (2) 4-Button Remote Transmitters (SAA474U)
- Anti-Code Grabbing Technology
- Starter Disable Output
- On-Board Relays for Door Locks and Dome Light Supervision
- Driver's Door Priority Unlock Output
- On-Board Parking Light Flash Relay
- Hyper Blue LED
- (2) Auxiliary Outputs
- Comfort Closure
- Horn Honk Output



RK20

Remote Start / Keyless Entry System

- (2) 4-Button Remote Transmitters (SAA474U)
- Anti-Code Grabbing Technology
- On-Board Relays for Remote Start with Anti-Grind Circuit
- Intelli-Tach RPM Detection Circuit
- D2D (Data-to-Data) for XPress Kits Modules
- Built-in Diesel Wait-to-Start Timer
- Built-in Turbo Timer
- Rear Window Defroster Output
- On-Board Parking Light Flash Relay
- (1) Auxiliary Output
- Comfort Closure
- Horn Honk Output
- ProSecurity Programmer Compatible



S100

Security / Keyless Entry System

- (2) 4-Button Remote Transmitters (SAA474U)
- Anti-Code Grabbing Technology
- Dual Stage Impact Sensor
- On-Board Parking Light Flash Relay
- Hyper Blue LED
- Multiple Tone Siren
- (2) Auxiliary Inputs
- Dome Light Supervision Output
- Driver's Door Priority Compatible
- ProSecurity Programmer Compatible



S670

2-Way Security / Keyless Entry System

- (1) 2-Way Remote Transmitter (SAA477U)
- (1) 4-Button Remote Transmitter (SAA474U)
- Anti-Code Grabbing Technology
- On-Board Dual Stage Impact Sensor
- On-Board Relays for Door Locks and Dome Light Supervision
- On-Board Starter Disable Relay
- Hyper Blue LED
- Multiple Tone Siren
- (3) Auxiliary Inputs
- Driver's Door Priority Compatible
- Horn Honk Output



SR7000

2-Way Security / Remote Start / Keyless Entry System

- (1) 2-Way LCD Remote Transmitter (SAA477U)
- (1) 4-Button Remote Transmitter (SAA474U)
- Anti-Code Grabbing Technology
- Compact Satellite Relay Pack for Remote Start with Anti-Grind Circuit
- Intelli-Tach RPM Detection
- D2D (Data-to-Data) for XPress Kits Modules
- Built-in Diesel Wait-to-Start Timer
- Built-in Turbo Timer
- Rear Window Defroster Output
- Dual Stage Impact Sensor
- On-Board Parking Light Flash Relay
- Hyper Blue LED
- Multiple Tone Siren
- (4) Auxiliary Outputs
- Dome Light Supervision Output
- Driver's Door Priority Unlock Compatible
- Comfort Closure
- Dedicated Horn Honk Output
- ProSecurity Programmer Compatible



SR9000

1-Mile Range 2-Way Security / Remote Start / Keyless Entry System

- (1) 2-Way LCD Remote Transmitter (SAA7701U)
- SDC (Secure Digital Communication) Capable of 1-Mile Range
- Anti-Code Grabbing Technology
- Compact Satellite Relay Pack for Remote Start with Anti-Grind Circuit
- Intelli-Tach RPM Detection
- D2D (Data-to-Data) for XPress Kits Modules
- Built-in Diesel Wait-to-Start Timer
- Built-in Turbo Timer
- Rear Window Defroster Output
- Dual Stage Impact Sensor
- On-Board Parking Light Flash Relay
- Hyper Blue LED
- Multiple Tone Siren
- (4) Auxiliary Outputs
- Dome Light Supervision Output
- Driver's Door Priority Unlock Compatible
- Comfort Closure
- Dedicated Horn Honk Output
- ProSecurity Programmer Compatible

Ungo Feature Descriptions

SDC (Secure Digital Communication)

In order to achieve a reliable 1-mile of range from the SR9000, Clarion has implemented Spread Spectrum Technology Secure Digital Communication. Spread Spectrum Technology takes a signal (in the case of the SR9000, a rolling code that tells the system what to do) and spreads the codes over a wide range of frequencies. The advantage of this is that because the signal is so spread out, it becomes more resistant to interference, and helps to guarantee the signal is received and decoded.

Ungo Spread Spectrum Technology operates at 900Mhz, further improving its resistance to interference

Anti-Code Grabbing Technology (a.k.a. Code Hopping)

The receiver and remotes use a mathematical formula called an algorithm to change their code each time the remote is used. This technology has been developed to increase the security of the unit. The control unit knows what the next codes should be. This helps to keep the remote "in sync" with the control unit even if you use the remote control out of range of the vehicle.

Anti-Grind Circuitry

Whenever the vehicle is remote started, advanced anti-grind circuitry prevents the starter from engaging, even if the key is turned to the start position. This prevents damage to the starter motor if the key is turned to the start position during remote start operation.

Gasoline or Diesel Vehicle Compatible

ProSecurity remote start systems can be installed into either gasoline or diesel vehicles.

Built-in Wait-to-Start Timer

Diesel vehicles need adequate time to warm up the glow plugs prior to starting. When the remote start is activated, the wait-to-start timer will allow the glow plugs to properly warm up before engaging the starter circuit. This feature prevents damage to the motor and glow plugs during remote start operation.

Comfort Closure

If programmed ON, the door lock output will activate the Comfort Closure output for 20 seconds. This output will begin 200mS after the final door lock output has completed regardless of the door lock programming. This feature is designed to integrate with vehicle's that can close the power windows and

sunroof by holding the key in the driver's door lock position, and will operate on both single input systems and two pulse dead bolt systems.

Dome Light Supervision Output

The dome light will illuminate for 30 seconds each time the system is disarmed using the remote control. This is useful for seeing inside the vehicle at night prior to entering it.

Dual Stage Impact Sensor

A sensor mounted in the vehicle's interior that is designed to detect impact(s) to the vehicle and/or vehicle's glass. Depending on the strength of the impact, the sensor can determine whether it's an accidental contact or an actual violation attempt.

Event History Diagnostics

ProSecurity systems can provide notification that the alarm had been previous triggered and what zone. The status LED will indicate which zone was involved by flashing in a sequence. The system will retain this information until the next time the ignition key is turned ON.

False Alarm Prevention

It prevents annoying repetitive sequences due to faulty door pin switches or environmental conditions, such as thunder, jackhammers, airport noise, etc.

Hyper Blue LED

A blue LED (light emitting diode) mounted at a discretionary location inside the vehicle. It is used to indicate the status of your system.

(IDR) Individual Remote Recognition

Individual Remote Recognition makes it possible to program different settings for each remote that is used with the system. Then, whenever a specific remote is used, the system will recall the settings assigned to that remote. IDR lets up to four users of the system have different settings that meet their specific needs. It is almost like having four separate alarms in your vehicle, one for each user.

Keyless Entry

Allows for easy entry or exiting of the vehicle without fumbling around for your keys. Keyless entry may require additional parts and labor.

Over and Under Rev Protection

The remote start system monitors the engine speed and will automatically shut the engine off if the RPMs rise above or fall below the programmed levels. This feature prevents damage to the motor due to fuel delivery system failures or other problems, which may cause the engine to race.

Programmable Override Sequence

ProSecurity systems can be programmed to respond to one to five pulses of the Valet/Override switch to disarm the system.

Progressive Door Unlock

For added security, the ProSecurity system can be configured to unlock the driver's door only, leaving the remaining doors locked. Pressing the UNLOCK button an additional time will unlock the remaining doors. This option may require additional parts and labor.

ProSecurity Power Up

The ProSecurity systems will store its current state of non-volatile memory. If the power is lost and then reconnected the system will recall the stored state from memory. This means if the unit is in Valet mode and the battery is disconnected for any reason, when the battery is reconnected the unit will still be in Valet mode.

ProSecurity Starter Disable

An automatic switch controlled by your system that prevents the vehicle's starter from cranking whenever the system is armed. The vehicle is never prevented from cranking when the system is disarmed, in Valet mode, or if the starter interrupt switch itself fails.

Rear Defroster Activation

During remote start operation, the rear defroster can be activated. This option may require additional parts and labor.

REV (Remote Enabled Valet)

REV allows access to entering and exiting Valet mode without having to disclose the location of the Valet/Override button. The security systems will not arm, even with the remote, but all convenience functions (door locks, trunk release, etc.) will still continue to work normally.

Remote Panic

If you are threatened in or near your vehicle, you can attract attention by triggering the system with your remote control. Just press and "PANIC" or "LOCK" button for two seconds, and you'll enter the panic mode. The siren will sound and the parking lights will flash for the programmed duration or until "PANIC" or "LOCK" button is pressed again.

Remote Silent Arm/Disarm Capability

The siren chirps upon Arm or Disarm can be temporarily eliminated for that one operation only. The Arm/Disarm chirps can be turned off permanently, if desired by entering the programming mode or using a ProSecurity Programmer. The sire chirps will also be eliminated during the warn-away trigger of the dual

stage impact sensor.

Selectable Ignition Controlled Door Locks

When the ignition is turned ON, the doors will lock within 3 seconds and unlock when the ignition is turned OFF. Ignition controlled lock and unlock are independent features and can be programmed separately

Selectable Siren Duration and Tones

The duration of the siren can be programmed to either 30 or 90 seconds. Some states have laws regulating how long a security system can sound. The multi-tone sirens included with ProSecurity systems can be easily modified to select desired tones or single tone.

Short Run Timer / Turbo Timer Mode

Short Run Timer / Turbo Timer mode keeps the engine running after arriving at your destination for a programmed period of time allowing the engine lubricants to circuit before shutting down the engine.

Intelli-Tach RPM Detection

Intelli-Tach gives the installer the performance of a hard wired tach wire, with the convenience of voltage sensing. It's far superior to any voltage sensing feature you've tried before.

Intelli-Tach monitors the cranking voltage of the vehicle using a very fast micro controller and an analog-to-digital converter. The microprocessor "saves" the base voltage as a reference. When Intelli-Tach "sees" the slightest uptick in voltage indicating that the alternator is charging the battery, the starter motor shuts off instantly.

Tachometer or Voltage Sensing

ProSecurity remote start systems either use a tachometer signal or sense the voltage of the vehicle during remote start activation. These signals inform the remote start system that the vehicle has successfully started and is running.

Trunk/Hatch Release Output

The system's auxiliary output can be programmed to operate a factory power release for the vehicle's trunk/hatch. If the factory release is not power activated, an optional trunk release solenoid can often be added. This output will then disable/ignore the dual stage impact sensor as you load or unload the vehicle.

D2D (Data-to-Data)

The RK20 and SR7000 have the ability to interface with XK modules through the D2D port. The advantage of using D2D interface is that there is less wiring involved in the installation. Check the XK module installation guide to determine which wires are not needed and which options are available.

Obtaining Optimal Range

Mounting the Extended Range Antenna

- 1. Clean the mounting area on the windshield with a quality glass cleaner or alcohol to remove any dirt or residue.
- 2. Plug the receiver/antenna cable into the receiver/antenna.
- 3. Mount the receiver/antenna vertically using the supplied double-sided tape.
- 4. Route the receiver/antenna cable to the control module and plug it into the four-pin antenna connector.

IMPORTANT:

- To achieve the best possible range, DO NOT leave the antenna cable bundled up tightly underneath the dash. Try to extend the cable to its full length during installation.
- DO NOT mount the control module to close to the vehicle's body control module and/or electronic control modules.

Mounting the Standard Antenna

- 1. Route the antenna as high as possible, extending the cable to its full length.
- 2. Secure the antenna cable in place with cable ties.

IMPORTANT:

- To achieve the best possible range, DO NOT leave the antenna cable bundled up tightly underneath the dash. Try to extend the cable to its full length during installation.
- DO NOT mount the control module to close to the vehicle's body control module and/or electronic control modules.

Mounting the Control Unit

- Do not mount or secure the control unit to close to the vehicle's body control module and/or electronic control modules.
- Do not mount or secure the control unit to close to sources of heat, such as the heater core and/or air ducts.
- Ground the control unit to a clean, paint-free sheet metal location using a factory bolt that DOES NOT have any vehicle components grounds attached to it.
 A screw should only be used when in conjunction with a two-sided lock washer. Under dash brackets and door sheet metal are not acceptable ground points.
- It is recommended that all security components be grounded at the same location.

Turning OFF the Anti-Code Grabbing Technology (a.k.a. Code Hopping)

Although this is a feature designed to prevent the remote transmitters from being cloned and re-transmitted to the control unit, it is virtually impossible to do. "Code Grabbers" have a very limited range, usually required to be within 5 feet of the remote transmitter while the button is being depressed. By turning off the Anti-Code Grabbing feature, it can increase the receiving/transmitting range by 30-35%.

Refer to the "System Features Menu" for the feature number and programming instructions.

Double Stacking (2) CR2016 Batteries

The CR2032 3-volt micro lithium coin cell battery inside the SAA474U (4-button) remote transmitter can be substituted with (2) CR2016 3-volt batteries. This can increase the range between 65-75% depending on the surroundings.

Procedure:

- 1. Insert a small flat head screwdriver into the notch on the bottom of the SAA474U remote transmitter.
- 2. Gently twist the screwdriver to spreading apart the two halves of the remote transmitter.
- 3. Open up the remote transmitter exposing the CR2032 battery and slide it out.
- 4. Slide (2) CR2016 batteries into the battery holder with the "+" facing upwards. (It may be easier to slide one battery in at a time. With the first battery in place, slide the second battery between the PC board and battery.)
- 5. Prior to closing the two halves of the remote transmitter, verify the batteries are installed correctly by pressing any of the buttons. The green LED indicator should illuminate while a button is depressed. If the LED does not illuminate, double-check the direction of the batteries. The "+" should be facing upwards matching the "+" on the battery retaining clip.
- 6. Snap together the two halves of the remote transmitter.

Obtaining a Tachometer Reference Signal

The tachometer reference signal is an essential signal for the safe operation of a remote start system. The signal informs the remote start module that the vehicle has successfully started and is running. It can also determine whether the vehicle is idling at a safe RPM level. In the event the vehicle's idle is racing or below safer operation level, the remote start module will shut down.

To test for a tachometer wire, a multi-meter capable of testing AC voltage must be used. The tachometer wire

will show between 1V and 6V AC. In multi-coil systems, the system can learn individual coil wires. Individual coil wires in a multi-coil system will register lower amounts of AC voltage. Also, if necessary, the system can use a fuel injector control wire for engine speed sensing. Common locations for a tachometer wire are at the ignition coil, back of the gauge cluster, engine computers, and automatic transmission computers.

How to Find a Tachometer Wire with a Multimeter

- 1. Set the multimeter to ACV or AC voltage (12V or 20V is fine)
- 2. Attach the (-) probe of the meter to chassis ground.
- 3. Start the vehicle and allow it to reach its normal idle speed.
- 4. Probe the wire you suspect of being the tachometer wire with the red probe of the meter.
- 5. If it's the correct wire the meter will read between 1V and 6V.

Multi-Coil Systems

- 1. Examine the individual coils and determine which wires are common on each coil. (Example: 2002 Chevy Pick-up: Each coil has 4 wires, three common wires on each coil and the 4th wire changes.)
- 2. The "different" colored wire can be used for the tachometer reference signal for the remote start module. (Only one coil wire is necessary.)
- 3. Teach the tachometer reference signal to the remote start module.

It is highly recommended to solder this connection, due to the heat generated inside the engine bay. Using t-taps or scotch-locks are likely to fail due to heat.

Fuel Injection Wire

- 1. Examine the individual fuel injectors and determine which wire(s) are common on each fuel injector.
- 2. The "different" colored wire can be used for the tachometer reference signal for the remote start module. (Only one fuel injector wire is necessary.)
- 3. Teach the tachometer reference signal to the remote start module.

It is highly recommended to solder this connection, due to the heat generated inside the engine bay. Using t-taps or scotch-locks are likely to fail due to heat.

Tachometer Reference Options

Tachless

If programmed to the voltage sense setting, the unit will crank the starter for a preset timed duration. Once the starter has been engaged, the system will check the voltage level to verify the engine is running.

When using tachless operation, it is essential to determine the correct crank time to prevent damage to the starter. It may take several remote start activations to determine the crank time.

Some vehicles have many accessories, which are turned on during remote start activation. In these vehicles, the variations of voltage between the engine off and the vehicle running is very slight and the remote start module may "think" the vehicle has not started. This can cause the remote start module to shut down after the vehicle has been started. If this is the case, the Voltage Check Level must be set to the LOW position.

Voltage sensing is not recommended in areas that experience extreme cold temperatures. The resistance in the vehicle's wiring increases which can cause intermittent remote start reliability.

Passive Anti-Theft Systems

Immobilizer (a.k.a. Transponder)

The Immobilizer uses an antenna ring around the ignition cylinder to energize a small transponder chip hidden in the ignition key. When the ignition is turned on, the chip is energized and the antenna ring sends the code to the Immobilizer control unit. The vehicle will only start if the code matches the one programmed into the vehicle.

Passkey/VATS

The Passkey/VATS system consists of four parts: the Passkey cylinder, the ignition switch, the instrument cluster panel (ICP), and the power train control module (PCM). The system requires that the key cylinder be mechanically turned using a key. When the key cylinder is properly turned, it generates a resistance code (R-code), which is sent to the IPC. The vehicle will only start if the R-code matches the key and ignition cylinder.

Passlock 2

The Passlock 2 system must see the correct resistance code at the correct time. When the ignition system is turned to the crank position, the "Bulb Check" wire is switched to ground. This starts a time window during which the instrument cluster panel (IPC) analyzes the resistance code (R-code). If the R-code is valid and is received in the proper window of time, the IPC sends a code via data bus to the PCM to enable the fuel injection

system. If the key cylinder itself is pulled out or damaged, it will not generate the resistance code and vehicle will not run.

Passkey 3

The Immobilizer uses an antenna ring around the ignition cylinder to energize a small transponder chip hidden in the ignition key. When the ignition is turned on, the chip is energized and the antenna rings sends the code to the Immobilizer control unit. If the code is incorrect the vehicle will not start.

PATS

Passive Anti-Theft System (PATS) uses a specially programmed key to start the vehicle, similar to the Immobilizer. It uses an antenna ring around the ignition cylinder to energize a small transponder chip hidden in the ignition key. When the ignition is turned on, the chip is energized and the antenna ring sends the code to the PATS control unit. If the code is incorrect the vehicle will not start.

Transmitter/Receiver Learn Routine

Ungo ProSecurity come with either one or two transmitters that have been programmed to the receiver. Use the following learn routine to add transmitters to the system or to change button assignments if desired.

The Valet/Override button must be in working order and plugged into the blue port on the Ungo ProSecurity system. There is a basic sequence to remember whenever programming a system: Door, Key, Choose, Transmitter and Release.

Procedure:

- 1. Open a door.
- 2. Turn the ignition On
- 3. Press and release the Valet/Override switch the number of times necessary to access the desired channel, then press the switch once more and Hold it. The siren (or horn) with chirp and the LED will blink the number of times corresponding to the channel that has been accessed.

K10, K20, RK1, RS10, S100, S400, S660, S670, SR1000, SR5000, SR6000, SR9000

- 4. While holding the Valet/Override switch, press the button on that you would like to control the selected receiver channel. The unit will chirp to confirm that code has been successfully programmed. It is not possible to teach a remote button to the system more than once.
- 5. Once the code is learned, the Valet/Override switch can be released.

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- 4. While holding the Valet/Override switch, press the "LOCK" button on the remote control. The siren chirps to confirm that the code has been successfully programmed or the selected feature has been reset. It is not possible to teach a remote control button to the system more than once.
- 5. Once the code is learned, or the feature reset, the Valet/Override switch can be released.

K10: Keyless Entry System

Replacement Remote Transmitter: SAA474U

Replacement Battery: CR2032

| Ch. Number | Function | Wire Color |
|------------|---|------------|
| 1 | Arm/Disarm/Panic | |
| 2 | Silent Mode/Remote Override/Trunk Release | Red/White |
| 3 | Remote Engine Start or Other Accessory | White/Blue |
| 4 | Arm Only | |
| 5 | Disarm Only | |
| 6 | Panic Only | |
| 7 | Auto-Learn Single Button Arm/Disarm Configuration | |
| 8 | Auto-Learn Standard Configuration | |
| 9 | Delete All Remotes | |

K20: Keyless Entry System

Replacement Remote Transmitter: SAA474U

Replacement Battery: CR2032

| Ch. Number | Function | Wire Color |
|------------|----------------------|------------|
| 1 | Auto-Learn | |
| 2 | Arm (Lock) Only | |
| 3 | Disarm (Unlock) Only | |
| 4 | Channel 2 | Red/White |
| 5 | Channel 3 | White/Blue |
| 6 | Arm/Disarm/Panic | |
| 7 | Panic Only | |
| 8 | Delete All Remotes | |

RK1: Remote Start/Keyless System

Replacement Remote Transmitter: SAA474U

Replacement Battery: CR2032

| Ch. Number | Function | Wire Color |
|------------|----------------------------|--------------|
| 1 | Auto-Learn | |
| 2 | Lock, Panic On / Panic Off | |
| 3 | Unlock, Panic Off | |
| 4 | Silent Mode/Channel 2 | Red/White |
| 5 | Remote Start | |
| 6 | Channel 4 | Violet/Black |
| 7 | Turbo Timer / Short Run | |
| 8 | Timer Mode | |
| 9 | Lock/Unlock/Panic | |
| 10 | Panic Only | |
| 11 | Delete All Remotes | |

RS10: Remote Start/Keyless System

Replacement Remote Transmitter: SAA474U

Replacement Battery: CR2032

| Ch. Number | Function | Wire Color |
|------------|-------------------------|------------|
| 1 | Auto-Learn | |
| 2 | Lock/Unlock | |
| 3 | Channel 2 | Red/White |
| 4 | Remote Engine Stat | |
| 5 | Turbo Timer / Short Run | |
| 6 | Timer Mode | |
| 7 | Rear Defogger Control | |
| 8 | Delete All Remotes | |

RK20: Remote Start/Keyless System

Replacement Remote Transmitter: SAA474U

Replacement Battery: CR2032

| Ch. Number | Function | Wire Color |
|------------|---|------------|
| 1 | Auto-Learn | |
| 2 | Delete All Remotes | |
| 3 | Reset Features: This resets all the features of the system | |
| | to the factory default settings | |
| 4 | Intelli-Tach Reset: Deletes all previously learned values for | |
| | Intelli-Tach, and on the next remote start sequence the unit | |
| | will being the Intelli-Tach initialization. | |

S100/S400: Security/Keyless System

Replacement Remote Transmitter: SAA474U

Replacement Battery: CR2032

| Ch. Number | Function | Wire Color |
|------------|---|------------|
| 1 | Arm/Disarm/Panic | |
| 2 | Silent Mode/Remote Override/Trunk Release | Red/White |
| 3 | Remote Engine Start or Other Accessory | White/Blue |
| 4 | Arm Only | |
| 5 | Disarm Only | |
| 6 | Panic Only | |
| 7 | Auto-Learn Standard Configuration | |
| 8 | Auto-Learn Single Button Arm/Disarm Configuration | |
| 9 | Delete All Remotes | |

S660: 2-Way Security/Keyless System

Replacement 4-Button Remote Transmitter: SAA474U

Replacement Battery: CR2032

Replacement LCD Remote Transmitter: SAA477U

Replacement Battery: AAA

| Ch. Number | Function | Wire Color |
|------------|---|--------------|
| 1 | Auto Learn Standard Configuration | |
| 2 | Arm Only | |
| 3 | Disarm Only | |
| 4 | Silent Mode/Remote Override/Trunk Release | Red/White |
| 5 | No Function | |
| 6 | Channel 4 | Violet/Black |
| 7 | Channel 5 | White/Black |
| 8 | No Function | |
| 9 | No Function | |
| 10 | Arm/Disarm/Panic | |
| 11 | Panic Only | |
| 12 | Delete All Transmitters | |

S670: 2-Way Security/Keyless System

Replacement 4-Button Remote Transmitter: SAA474U

Replacement Battery: CR2032

Replacement LCD Remote Transmitter: SAA477U

Replacement Battery: AAA

| Ch. Number | Function | Wire Color |
|------------|---|--------------|
| 1 | Arm/Disarm/Panic | |
| 2 | Channel 2 | Red/White |
| 3 | Channel 3 | White/Blue |
| 4 | Channel 4 | Violet/Black |
| 5 | Arm Only | |
| 6 | Disarm Only | |
| 7 | Panic Only | |
| 8 | Auto-Learn (4-Button and LCD 2-Way Transmitter) | |
| 9 | Auto-Learn (3-Button Optional Transmitter) | |
| 10 | Delete All Transmitters | |

SR1000: Remote Stat/Security/Keyless System

Replacement 4-Button Remote Transmitter: SAA474U

Replacement Battery: CR2032

| Ch. Number | Function | Wire Color |
|------------|---|--------------|
| 1 | Auto-Learn Standard Configuration | |
| 2 | Arm Only | |
| 3 | Disarm Only | |
| 4 | Silent Mode/Remote Override/Trunk Release | Red/White |
| 5 | Remote Start | |
| 6 | Channel 4 | Violet/Black |
| 7 | Channel 5 | White/Black |
| 8 | Turbo Timer / Short Run | |
| 9 | Timer Mode | |
| 10 | Arm/Disarm/Panic | |
| 11 | Panic Only | |
| 12 | Delete All Remotes | |

SR5000: 2-Way Remote Stat/Security/Keyless System

Replacement 4-Button Remote Transmitter: SAA474U

Replacement Battery: CR2032

Replacement LCD Remote Transmitter: SAA477U

Replacement Battery: AAA

| Ch. Number | Function | Wire Color |
|------------|---|--------------|
| 1 | Arm/Disarm/Panic | |
| 2 | Silent Mode/Remote Override/Trunk Release | Red/White |
| 3 | Remote Start | |
| 4 | Second Unlock or Other Accessory | Violet/Black |
| 5 | Arm Only | |
| 6 | Disarm Only | |
| 7 | Panic Only | |
| 8 | Auto-Learn Standard Configuration | |
| 9 | Auto-Learn Single Button Configuration | |
| 10 | Delete All Remotes | |

SR6000: 2-Way Remote Stat/Security/Keyless System

Replacement 4-Button Remote Transmitter: SAA474U

Replacement Battery: CR2032

Replacement LCD Remote Transmitter: SAA477U

Replacement Battery: AAA

| Ch. Number | Function | Wire Color |
|------------|---|--------------|
| 1 | Auto-Learn Standard Configuration | |
| 2 | Arm Only | |
| 3 | Disarm Only | |
| 4 | Silent Mode/Remote Override/Trunk Release | Red/White |
| 5 | Remote Start | |
| 6 | Channel 4 | Violet/Black |
| 7 | Channel 5 | White/Black |
| 8 | Turbo Timer / Short Run | |
| 9 | Timer Mode | |
| 10 | Arm/Disarm/Panic | |
| 11 | Panic Only | |
| 12 | Delete All Remotes | |

SR7000: 2-Way Security/Remote Start/Keyless Entry

Replacement 4-Button Remote Transmitter: SAA474U

Replacement Battery: CR2032

Replacement LCD Remote Transmitter: SAA477U

Replacement Battery: AAA

| Ch. Number | Function | Wire Color |
|------------|---|------------|
| 1 | Auto-Learn Standard Configuration | |
| 2 | Delete Remotes: This feature will erase all remotes from the | |
| | memory of the system. | |
| | NOTE: Does not reset the programmed features of the | |
| | system or reset the Intelli-Tach setting. | |
| 3 | Reset Features: This resets all the features of the system | |
| | to the factory default settings. | |
| | NOTE: Does not delete the remotes from the system or | |
| | reset the Intelli-Tach setting. | |
| 4 | Intelli-Tach Reset: Deletes all previously learned values for | |
| | Intelli-Tach, and on the next remote start sequence the unit | |
| | will begin Intelli-Tach initialization. | |
| | NOTE: The "ZAP" feature on the ProSecurity Programmer | |
| | does not reset the Intelli-Tach setting. | |

SR9000: 2-Way Security/Remote Start/Keyless Entry

Replacement LCD Remote Transmitter: SAA7701U

Replacement Battery: AAA

| Ch. Number | Function | Wire Color |
|------------|---|--------------|
| 1 | Auto-Learn Standard Configuration | |
| 2 | Arm Only | |
| 3 | Disarm Only | |
| 4 | Silent Mode/Remote Override/Trunk Release | Red/White |
| 5 | Remote Start | |
| 6 | Channel 4 | Violet/Black |
| 7 | Channel 5 | White/Black |
| 8 | Channel 6 | |
| 9 | Turbo Timer / Short Run | |
| 10 | Timer Mode | |
| 11 | Arm/Disarm/Panic | |
| 12 | Panic Only | |
| 13 | Rear Defogger | |
| 14 | Delete All Transmitters | |

Module Programming Routine

The Module Programming Routine dictates how the unit operates. Due to the number of steps, they have been broken up into different menus. It is possible to access and change any of the feature settings using the Valet/Override switch. However, this process can be greatly simplified by using the ProSecurity Programmer. Any of the settings can be changed and then assigned to a particular remote, up to four, a feature called individual remote recognition. Each time that particular remote is used to disarm the system, the assigned feature settings will be recalled. Individual recognition is only possible when programming the unit via the ProSecurity Programmer.

If the system was programmed using the ProSecurity Programmer, the learn routine may be locked. If the siren generates one long chirp when attempting to program the unit, the Module Programming Routine is locked and must be unlocked using the ProSecurity Programmer.

Procedure:

- 1. Open a door.
- 2. Turn the ignition On, then back Off.
- 3. Press and HOLD the Valet/Override switch: (The Valet/Override switch must be plugged into the blue port.) After three seconds the siren will chirp once indicating entry to Menu #1. If this is the menu you wish to access, release the button and go on to Step 4. If the button is not released, you will jump to Menu #2 and the siren will chirp twice. If the button is not released, you will jump to Menu #3 and the siren will chirp three times. Once you have selected the desired menu, release the Valet/Override button and then proceed to Step 4.
- 4. Press and release the Valet/Override switch the number of times corresponding to the feature you wish to change. Then press the switch once more and HOLD it. The siren will chirp the number of times equal to the step you have accessed.
- 5. While holding the Valet/Override switch, you can toggle the feature on or off using the remote. Pressing the "LOCK" button will select the one chirp setting. Pressing the "UNLOCK" button will select the two chirp setting.

6. Release the Valet/Override switch.

K10: Keyless Entry System

| Feature Number | Default LED ON Setting (Press "LOCK" Button) | LED OFF Setting (Press "UNLOCK" Button) |
|-------------------|--|---|
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Controlled Door Lock ON | Ignition Controlled Door Lock OFF |
| 4 | Ignition Controlled Door Unlock ON | Ignition Controlled Door Unlock OFF |
| 5 | Active Locking | Passive Locking |
| 6 | Ignition Controlled Domelight ON | Ignition Controlled Domelight OFF |
| 7 | 0.8 Second Door Lock Pulses | 3.5 Second Door Lock Pulses |
| 8 | Double Pulse Unlock OFF | Double Pulse Unlock ON |
| 9 | Security Features ON | Security Features OFF |
| 10 | Code Hopping ON | Code Hopping OFF |

K20: Keyless Entry System

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|------------------------------------|-------------------------------------|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Ignition Controlled Door Lock ON | Ignition Controlled Door Lock OFF |
| 2 | Ignition Controlled Door Unlock ON | Ignition Controlled Door Unlock OFF |
| 3 | Ignition Controlled Domelight ON | Ignition Controlled Domelight OFF |
| 4 | 0.8 Second Door Lock Pulses | 3.5 Second Door Lock Pulses |
| 5 | Double Pulse Unlock OFF | Double Pulse Unlock ON |
| 6 | Double Pulse Lock OFF | Double Pulse Lock ON |
| 7 | Comfort Closure OFF | Comfort Closure ON |
| 8 | Code Hopping ON | Code Hopping OFF |

RK1: Remote Start/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

MENU #1

| Feature Number | Default LED ON Setting (Press "LOCK" Button) | LED OFF Setting (Press "UNLOCK" Button) |
|-------------------|---|---|
| 1 | Active Mode | Passive Mode |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Lock ON | Ignition Lock OFF |
| 4 | Ignition Unlock ON | Ignition Unlock OFF |
| 5 | Active Locking | Passive Locking |
| 6 | Panic with Ignition ON | Panic with Ignition OFF |
| 7 | Door Lock Pulse Duration 0.8 Seconds | Door Lock Pulse Duration 3.5 Seconds |
| 8 | Double Unlock Pulse OFF | Double Unlock Pulse ON |
| 9 | Channel 2 Delayed Validity | Channel 2 Latched (2), Latch Reset with Ignition (3), 30-Second Timed (4) |
| 10 | Factory Alarm Disarm w/Channel 2 ON | Factory Alarm Disarm w/Channel 2 OFF |
| 11 | Security Features ON | Security Features OFF |
| 12 | Code Hopping ON | Code Hopping OFF |
| 13 | Channel 4 Validity | Channel 4 Latched (2), Latch Reset with Ignition (3), 30-Second Timed (4) |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

Factory default settings are indicated in **bold** in the following feature tables.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Engine Check ON | Engine Check OFF |
| 2 | Tachometer Engine Check | Voltage Engine Check |
| 3 | 12 Minute Run Time (1) | 24 Minutes (2), 60 Minutes (3) Run Time |
| 4 | Flashing Parking Light Output | Constant Parking Light Output |
| 5 | Cranking Time 0.6 sec. (1) | Crank Time: 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5) |
| 6 | Voltage Level High Check | 1.6 (6), 1.8 (7), 2.0 (8), 4.0 (9) Seconds |
| 7 | Activation Pulse: 1 (1) | Activation Pulses: 2 (2), 3 (3) |
| 8 | 2nd Ignition Output | 2nd Accessory Output |
| 9 | Acc. State During Wait to Start OFF | Acc. State During Wait to Start ON |
| 10 | 2nd Status Output Normal | Rear Defogger Latched (2), Rear Defogger |
| | | Pulse (3) |
| 11 | Anti-Grind ON | Anti-Grind OFF |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

RS10: Remote Start/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|--------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Engine Check ON | Engine Checking OFF |
| 2 | Tachometer Checking Type | Voltage Checking Type |
| 3 | 12 Minutes Run Time (1)* | 24 Minutes (2), 60 Minutes (3) Run Time |
| 4 | Flashing Parking Light Output | Constant Parking Light Output |
| 5 | Crank Time 0.6 sec. (1) | Crank Time: 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5) |
| | | 1.6 (6), 1.8 (7), 2.0 (8), 4.0 (9) |
| 6 | Voltage Check High Level | Voltage Check Low Level |
| 7 | Short Run (Turbo Timer): 1 (1) min. | Short Run (Turbo Timer): 3 (2), 5 (3), 10 (4) |
| | | Minutes |
| 8 | Activation Pulse: 1 (1) | Activation Pulses: 2 (2), 3 (3) |
| 9 | Ign/Acc Output: Ignition | Ign/Acc Output: Accessory |
| 10 | Acc. State During Wait to Start: OFF | Acc. State During Wait to Start: ON |
| 11 | 2nd Status Output: Normal (1) | Rear Defogger Latched (2), Pulsed (3) |
| 12 | Diesel Timer Wait to Start Input (1) | Time 15 (2), 30 (3), 45 (4) Seconds |
| 13 | Run Time (Timer Mode) 12 min. (1) | 3 (2), 6 (3), 9 (4) Minutes |
| 14 | Door Lock Pulse Duration 0.8 Sec (1) | 3.5 (2), 0.4 (3) Seconds |
| 15 | Unlock Output 1 Pulse | Unlock Output 2 Pulses |
| 16 | Lock Output 1 Pulse | Lock Output 2 Pulses |
| 17 | Ignition Unlock ON | Ignition Unlock OFF |
| 18 | Ignition Lock ON | Ignition Lock OFF |
| 19 | Factory Alarm Disarm with Unlock | Before Unlock (2), Remote Engine Start |
| | | Only (3) |
| 20 | Factory Alarm Disarm 1 Pulse | 2 Pulses |
| 21 | Comfort Closure ON | OFF |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

RK20: Remote Start/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|--------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Horn Honk Pulses OFF (1) | 20mS (2), 30mS (3), 40mS (4), 50mS (5) |
| 2 | Ignition Lock OFF | Ignition Lock ON |
| 3 | Ignition Unlock OFF | Ignition Unlock ON |
| 4 | Door Lock Pulse Duration 0.8 Seconds | 3.5 (2), 0.4 (3) Seconds |
| 5 | Unlock Output 1 Pulse | Unlock Output 2 Pulses |
| 6 | Lock Output 1 Pulse | Lock Output 2 Pulses |
| 7 | Factory Alarm Disarm w/Unlock (1) | Before Unlock (2), Remote Start Only (3) |
| 8 | Factory Alarm Disarm 1 Pulse | 2 Pulses |
| 9 | Comfort Closure OFF (1) | Version 1 (2), Version 2 (3) |
| 10 | Panic Mode ON | Panic Mode OFF |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

RK20: Remote Start/Keyless Entry System continued

Factory default settings are indicated in **bold** in the following feature tables.

MENU #2

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Intelli-Tach (1) | Voltage (2), OFF (3), Tachometer (4) |
| 2 | 12 Minute Run Time (1) | 24 Minutes (2), 60 Minutes (3) Run Time |
| 3 | Constant Parking Light Output | Flashing Parking Light Output |
| 4 | Cranking Time 0.6 sec. (1) | Crank Time: 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5) |
| | | 1.6 (6), 1.8 (7), 2.0 (8), 4.0 (9) Seconds |
| 5 | Activation Pulse: 1 (1) | Activation Pulses: 2 (2) , 3 (3) |
| 6 | 2nd Ignition Output | 2nd Accessory Output |
| 7 | Acc. State During Wait to Start OFF | Acc. State During Wait to Start ON |
| 8 | 2nd Status Output Normal | Rear Defogger Latched (2), Rear Defogger |
| | | Pulse (3) |
| 9 | Anti-Grind ON | Anti-Grind OFF |
| 10 | Wait to Start Timer: 0 sec (1) | 15 (2), 30 (3), 45 (3) seconds |

S100/S400: Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

MENU #1

| Feature Number | Default LED ON Setting (Press "LOCK" Button) | LED OFF Setting (Press "UNLOCK" Button) |
|-------------------|---|---|
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Controlled Door Locks ON | Ignition Control Door Locks OFF |
| 4 | Active Locking OFF | Passive Locking ON |
| 5 | Panic with Ignition ON | No Panic with Ignition ON |
| 6 | 0.8 Second Door Lock Pulse | 3.5 Second Door Lock Pulse |
| 7 | Forced Passive Arming ON | Forced Passive Arming OFF |
| 8 | Automatic Engine Disable ON | Automatic Engine Disable OFF |
| 9 | Armed When Driving | Anti-Carjacking System |
| 10 | Anti-Code Grabbing ON | Anti-Code Grabbing OFF |

Factory default settings are indicated in **bold** in the following feature tables.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Siren | Horn Honk |
| 2 | 30-Second Siren Duration | 60-Second Siren Duration |
| 3 | False Alarm Prevention Circuitry ON | False Alarm Prevention Circuitry OFF |
| 4 | Progress Door Trigger | Instant Door Trigger |
| 5 | Override Switch Input: 1 Pulse | Override Switch Input: 2-5 Pulses |
| 6 | Open Zone Bypass Notice: ON | Open Zone Bypass Notice: OFF |
| 7 | Ignition Controlled Dome Light ON | Ignition Controlled Dome Light OFF |
| 8 | Single Unlock Pulse | Double Unlock Pulse |
| 9 | Channel 3: Validity | Channel 3: Latched/Latched (2), Reset with |
| | | ignition(3), 30-Second Timed (4), Second |
| | | Unlock Output (5) |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

S660: 2-Way Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

MENU #1

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-----------------------------|------------------------------|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Door Locks ON | Ignition Door Locks OFF |
| 4 | Ignition Door Unlocks ON | Ignition Door Unlocks OFF |
| 5 | Active Locking Only | Passive Locking |
| 6 | Panic with Ignition ON | Panic with Ignition OFF |
| 7 | 0.8 Second Door Lock Pulse | 3.5 Second Door Lock Pulse |
| 8 | Forced Passive Arming ON | Forced Passive Arming OFF |
| 9 | Automatic Engine Disable ON | Automatic Engine Disable OFF |
| 10 | Armed When Driving | Anti-Carjacking System |
| 11 | Anti-Code Grabbing ON | Anti-Code Grabbing OFF |

Factory default settings are indicated in **bold** in the following feature tables.

MENU #2

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Siren Output Constant | Siren Output Pulsed |
| 2 | 30-Second Siren Duration | 60-Second Siren Duration |
| 3 | False Alarm Prevention Circuitry ON | False Alarm Prevention Circuitry OFF |
| 4 | Progress Door Trigger | Instant Door Trigger |
| 5 | Override Switch Input: 1 Pulse | Override Switch Input: 2-5 Pulses |
| 6 | Open Zone Bypass Notice: ON | Open Zone Bypass Notice: OFF |
| 7 | Ignition Controlled Dome Light ON | Ignition Controlled Dome Light OFF |
| 8 | Single Unlock Pulse | Double Unlock Pulse |
| 9 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF |
| 10 | Channel 4 Validity | Channel 4: Latched/Latched (2), Reset with |
| | | Ignition (3), 30-Sec. Timed (4), 60-Sec. |
| | | Timed (5), 90-Sec. Timed (6) |
| 11 | Channel 5 Validity | Channel 5: Latched/Latched (2), Reset with |
| | | Ignition (3), 30-Sec. Timed (4), 60-Sec. |
| | | Timed (5), 90-Sec. Timed (6) |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

S670: 2-Way Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-----------------------------|------------------------------|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Door Locks ON | Ignition Door Locks OFF |
| 4 | Active Locking Only | Passive Locking |
| 5 | 0.8 Second Door Lock Pulse | 3.5 Second Door Lock Pulse |
| 6 | Double Unlock Pulse OFF | Double Unlock Pulse ON |
| 7 | Anti-Code Grabbing ON | Anti-Code Grabbing OFF |
| 8 | Door Trigger Error Chirp ON | Door Trigger Error Chirp OFF |
| 9 | Lock Pulse Single | Lock Pulse Double |
| 10 | Comfort Closure OFF | Comfort Closure ON |

SR1000: Remote Start/Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

MENU #1

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-----------------------------|------------------------------|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Locks ON | Ignition Locks OFF |
| 4 | Ignition Unlock ON | Ignition Unlock OFF |
| 5 | Active Locking Only | Passive Locking |
| 6 | Panic With Ignition ON | No Panic With Ignition |
| 7 | 0.8 Second Door Lock Pulse | 3.5 Second Door Lock Pulse |
| 8 | Forced Passive Arming ON | Forced Passive Arming OFF |
| 9 | Automatic Engine Disable ON | Automatic Engine Disable OFF |
| 10 | Armed While Driving ON | Armed While Driving OFF |
| 11 | Anti-Code Grabbing ON | Anti-Code Grabbing OFF |

MENU #2

| Feature Number | Default LED ON Setting (Press "LOCK" Button) | LED OFF Setting (Press "UNLOCK" Button) |
|-------------------|---|--|
| 1 | Siren Output Constant | Siren Output Pulsed |
| 2 | 30-Second Siren Duration | 60-Second Siren Duration |
| 3 | False Alarm Prevention Circuitry ON | False Alarm Prevention Circuitry OFF |
| 4 | Progress Door Trigger | Instant Door Trigger |
| 5 | Override Switch Input: 1 Pulse | Override Switch Input: 2-5 Pulses |
| 6 | Open Zone Bypass Notice: ON | Open Zone Bypass Notice: OFF |
| 7 | Ignition Controlled Dome Light ON | Ignition Controlled Dome Light OFF |
| 8 | Single Unlock Pulse | Double Unlock Pulse |
| 9 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF |
| 10 | Channel 4 Validity | Channel 4: Latched/Latched (2), Reset with |
| | | Ignition (3), 30-Sec. Timed (4), 60-Sec. |
| | | Timed (5), 90-Sec. Timed (6) |
| 11 | Channel 5 Validity | Channel 5: Latched/Latched (2), Reset with |
| | | Ignition (3), 30-Sec. Timed (4), 60-Sec. |
| | | Timed (5), 90-Sec. Timed (6) |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

| Feature Number | Default LED ON Setting (Press "LOCK" Button) | LED OFF Setting (Press "UNLOCK" Button) |
|-------------------|---|--|
| 1 | Engine Checking ON | Engine Checking OFF |
| 2 | Engine Checking Tach | Engine Checking Voltage |
| 3 | Run Time: 12 Minutes (1) | Run Time: 24 Min (2), 60 Min. (3) |
| 4 | Parking Lights Flashing | Parking Lights Constant |
| 5 | Crank Time: 0.6 Sec (1) | 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5), 1.6 (6), |
| | | 1.8 (7), 2.0 (8), 4.0 (9) |
| 6 | Voltage Check: High | Voltage Check: Low |
| 7 | Short Run/Turbo Timer: 1 Min (1) | 3 (2), 5 (3), 10 (4) Minutes |
| 8 | Activation Pulse Count: 1 (1) | Activation Pulse Count: 2 (2) |
| 9 | 2nd Ign/ACC Output: Ignition | Accessory |
| 10 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF |
| 11 | 2nd Status Output: Normal | Rear Defogger: Latched 10 Min (2), |
| | | Pulsed (3) |
| 12 | Anti-Grind: ON | Anti-Grind: OFF |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

SR5000: 2-Way Remote Start/Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

MENU #1

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-----------------------------|------------------------------|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Door Locks ON | Ignition Door Locks OFF |
| 4 | Active Locking Only | Passive Locking |
| 5 | Panic With Ignition ON | No Panic With Ignition |
| 6 | 0.8 Second Door Lock Pulse | 3.5 Second Door Lock Pulse |
| 7 | Forced Passive Arming ON | Forced Passive Arming OFF |
| 8 | Automatic Engine Disable ON | Automatic Engine Disable OFF |
| 9 | Armed While Driving ON | Armed While Driving OFF |
| 10 | Anti-Code Grabbing ON | Anti-Code Grabbing OFF |

MENU #2

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Siren Output Constant | Siren Output Pulsed |
| 2 | 30-Second Siren Duration | 60-Second Siren Duration |
| 3 | False Alarm Prevention Circuitry ON | False Alarm Prevention Circuitry OFF |
| 4 | Progress Door Trigger | Instant Door Trigger |
| 5 | Override Switch Input: 1 Pulse | Override Switch Input: 2-5 Pulses |
| 6 | Open Zone Bypass Notice: ON | Open Zone Bypass Notice: OFF |
| 7 | Ignition Controlled Dome Light ON | Ignition Controlled Dome Light OFF |
| 8 | Single Unlock Pulse | Double Unlock Pulse |
| 9 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF |
| 10 | Channel 4 Validity | Channel 4: Latched/Latched (2), Reset with |
| | | Ignition (3), 30-Sec. Timed (4), Second |
| | | Unlock Output (5) |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

| Feature Number | Default LED ON Setting (Press "LOCK" Button) | LED OFF Setting (Press "UNLOCK" Button) |
|-------------------|--|--|
| 1 | Engine Checking ON | Engine Checking OFF |
| 2 | Engine Checking Tach | Engine Checking Voltage |
| 3 | Run Time: 12 Minutes (1) | Run Time: 24 Min (2), 60 Min. (3) |
| 4 | Parking Lights Flashing | Parking Lights Constant |
| 5 | Crank Time: 0.6 Sec (1) | 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5), 1.6 (6), 1.8 (7), 2.0 (8), 4.0 (9) |
| 6 | Voltage Check: High | Voltage Check: Low |
| 7 | Auxiliary Output: Factory Disarm | Special Accessory |
| 8 | Status Output | Factory Re-arm Output |
| 9 | Anti-Grind: ON | Anti-Grind: OFF |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

SR6000: Remote Start/Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

MENU #1

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-----------------------------|------------------------------|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Locks ON | Ignition Locks OFF |
| 4 | Ignition Unlock ON | Ignition Unlock OFF |
| 5 | Active Locking Only | Passive Locking |
| 6 | Panic With Ignition ON | No Panic With Ignition |
| 7 | 0.8 Second Door Lock Pulse | 3.5 Second Door Lock Pulse |
| 8 | Forced Passive Arming ON | Forced Passive Arming OFF |
| 9 | Automatic Engine Disable ON | Automatic Engine Disable OFF |
| 10 | Armed While Driving ON | Armed While Driving OFF |
| 11 | Anti-Code Grabbing ON | Anti-Code Grabbing OFF |

MENU #2

| Feature Number | Default LED ON Setting (Press "LOCK" Button) | LED OFF Setting (Press "UNLOCK" Button) |
|-------------------|---|--|
| 1 | Siren Output Constant | Siren Output Pulsed |
| 2 | 30-Second Siren Duration | 60-Second Siren Duration |
| 3 | False Alarm Prevention Circuitry ON | False Alarm Prevention Circuitry OFF |
| 4 | Progress Door Trigger | Instant Door Trigger |
| 5 | Override Switch Input: 1 Pulse | Override Switch Input: 2-5 Pulses |
| 6 | Open Zone Bypass Notice: ON | Open Zone Bypass Notice: OFF |
| 7 | Ignition Controlled Dome Light ON | Ignition Controlled Dome Light OFF |
| 8 | Single Unlock Pulse | Double Unlock Pulse |
| 9 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF |
| 10 | Channel 4 Validity | Channel 4: Latched/Latched (2), Reset with |
| | | Ignition (3), 30-Sec. Timed (4), 60-Sec. |
| | | Timed (5), 90-Sec. Timed (6) |
| 11 | Channel 5 Validity | Channel 5: Latched/Latched (2), Reset with |
| | | Ignition (3), 30-Sec. Timed (4), 60-Sec. |
| | | Timed (5), 90-Sec. Timed (6) |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|----------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Engine Checking ON | Engine Checking OFF |
| 2 | Engine Checking Tach | Engine Checking Voltage |
| 3 | Run Time: 12 Minutes (1) | Run Time: 24 Min (2), 60 Min. (3) |
| 4 | Parking Lights Flashing | Parking Lights Constant |
| 5 | Crank Time: 0.6 Sec (1) | 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5), 1.6 (6), |
| | | 1.8 (7), 2.0 (8), 4.0 (9) |
| 6 | Voltage Check: High | Voltage Check: Low |
| 7 | Short Run/Turbo Timer: 1 Min (1) | 3 (2), 5 (3), 10 (4) Minutes |
| 8 | Activation Pulse Count: 1 (1) | Activation Pulse Count: 2 (2) |
| 9 | 2nd Ign/ACC Output: Ignition | Accessory |
| 10 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF |
| 11 | 2nd Status Output: Normal | Rear Defogger: Latched 10 Min (2), |
| | | Pulsed (3) |
| 12 | Anti-Grind: ON | Anti-Grind: OFF |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

SR7000: 2-Way Remote Start/Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

MENU #1

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-----------------------------------|---|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Lock ON | Ignition Lock OFF |
| 4 | Ignition Unlock ON | Ignition Unlock OFF |
| 5 | Active Locking Only | Passive Locking |
| 6 | Panic with Ignition ON | No Panic with Ignition ON |
| 7 | 0.8 Sec. Door Lock Pulse (1) | 3.4 (2), 0.4 (3) Seconds |
| 8 | Forced Passive Arming ON | Forced Passive Arming OFF |
| 9 | Automatic Engine Disable ON | Automatic Engine Disable OFF |
| 10 | Armed When Driving ON | Armed When Driving OFF |
| 11 | Code Hopping ON | Code Hopping OFF |
| 12 | Horn Output Pulsed | Constant |
| 13 | Horn Function Full Alarm Only (1) | Siren Function - Chirp Length 20mS (2), |
| | | 30mS (3), 40mS (4), 50mS (5) |
| 14 | Comfort Closure ON | Comfort Closure OFF (2), |
| | | Comfort Closure OFF (3) |

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|--------------------------------------|---|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | 30-Second Siren Duration | 60-Second Siren Duration |
| 2 | False Alarm Prevention Circuitry ON | False Alarm Prevention Circuitry OFF |
| 3 | Progress Door Trigger | Instant Door Trigger |
| 4 | Override Switch Input: 1 Pulse | Override Switch Input: 2-5 Pulses |
| 5 | Door Trigger Error Chirp ON | Door Trigger Error Chirp OFF |
| 6 | Ignition Controlled Dome Light ON | Ignition Controlled Dome Light OFF |
| 7 | Single Unlock Pulse | Double Unlock Pulse |
| 8 | Single Lock Pulse | Double Lock Pulse |
| 9 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF |
| 10 | Factory Alarm Disarm with Unlock (1) | Before Unlock (2), Remote Start Only (3) |
| 11 | Factory Alarm Disarm 1 Pulse | 2 Pulses |
| 12 | Auxiliary 1 Validity (1) | Latched (2), Latch Reset with Ignition (3), |
| | | 30-Sec. Timed (4), 60-Sec. Timed (5), |
| | | 90-Sec. Timed (6) |
| 13 | Auxiliary 1 Linking None (1) | Arm (2), Disarm (3), Remote Start (4) |
| 14 | Auxiliary 2 Validity (1) | Latched (2), Latch Reset with Ignition (3), |
| | | 30-Sec. Timed (4) |
| 15 | Auxiliary 2 Linking None (1) | Arm (2), Disarm (3), Remote Start (4) |
| 16 | Auxiliary 3 Validity (1) | Latched (2), Latch Reset with Ignition (3), |
| | | 30-Sec. Timed (4) |
| 17 | Auxiliary 3 Linking None (1) | Arm (2), Disarm (3), Remote Start (4) |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

SR7000: 2-Way Remote Start/Security/Keyless Entry System (continued)

Factory default settings are indicated in **bold** in the following feature tables.

MENU #3

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Engine Checking: Intelli-Tach | Voltage (2), OFF (3), Tachometer (4) |
| 2 | Run Time: 12 Minutes (1) | Run Time: 24 Min (2), 60 Min. (3) |
| 3 | Parking Lights Flashing | Parking Lights Constant |
| 4 | Crank Time: 0.6 Sec (1) | 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5), 1.6 (6), |
| | | 1.8 (7), 2.0 (8), 4.0 (9) |
| 5 | Activation Pulse 1 | Activation Pulse 2 |
| 6 | 2nd Ign/Acc Output: Ignition | Accessory |
| 7 | Acc. State During Wait-to-Start OFF | ON |
| 8 | 2nd Status Output: Normal | Rear Defogger: Latch 10 Min. (2), |
| | | Pulse (3) |
| 9 | Anti-Grind ON | OFF |
| 10 | Diesel Timer: Wait-to-Start Input | Timed 15 (2), 30 (3), 45 (4) Seconds |
| 11 | Timer Mode Run Time: 12 Min | 3 (2), 6 (3), 9 (4) Minutes |
| 12 | Timer Mode: Timed Starts | Temp. Starts |
| 13 | Turbo Timer/Short Run: 1 Min (1) | 3 (2), 5 (3), 10 (4) Minutes |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

SR9000: 2-Way Remote Start/Security/Keyless Entry System

Factory default settings are indicated in **bold** in the following feature tables.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|-----------------------------------|---|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Active Arming | Passive Arming |
| 2 | Chirps ON | Chirps OFF |
| 3 | Ignition Lock ON | Ignition Lock OFF |
| 4 | Ignition Unlock ON | Ignition Unlock OFF |
| 5 | Active Locking Only | Passive Locking |
| 6 | Panic with Ignition ON | No Panic with Ignition ON |
| 7 | 0.8 Sec. Door Lock Pulse (1) | 3.4 (2), 0.4 (3) Seconds |
| 8 | Forced Passive Arming ON | Forced Passive Arming OFF |
| 9 | Automatic Engine Disable ON | Automatic Engine Disable OFF |
| 10 | Armed When Driving ON | Armed When Driving OFF |
| 11 | Code Hopping ON | Code Hopping OFF |
| 12 | Horn Output Pulsed | Constant |
| 13 | Horn Function Full Alarm Only (1) | Siren Function - Chirp Length 20mS (2), |
| | | 30mS (3), 40mS (4), 50mS (5) |
| 14 | Comfort Closure ON | Comfort Closure OFF (2), |
| | | Comfort Closure OFF (3) |

SR9000: 2-Way Remote Start/Security/Keyless Entry System (continued) MENU #2

| Feature | Default LED ON Setting | LED OFF Setting | |
|---------|--------------------------------------|---|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) | |
| 1 | 30-Second Siren Duration | 60-Second Siren Duration | |
| 2 | False Alarm Prevention Circuitry ON | False Alarm Prevention Circuitry OFF | |
| 3 | Progress Door Trigger | Instant Door Trigger | |
| 4 | Override Switch Input: 1 Pulse | Override Switch Input: 2-5 Pulses | |
| 5 | Door Trigger Error Chirp ON | Door Trigger Error Chirp OFF | |
| 6 | Ignition Controlled Dome Light ON | Ignition Controlled Dome Light OFF | |
| 7 | Single Unlock Pulse | Double Unlock Pulse | |
| 8 | Single Lock Pulse | Double Lock Pulse | |
| 9 | Factory Disarm with Channel 2 ON | Factory Disarm with Channel 2 OFF | |
| 10 | Factory Alarm Disarm with Unlock (1) | Before Unlock (2), Remote Start Only (3) | |
| 11 | Factory Alarm Disarm 1 Pulse | 2 Pulses | |
| 12 | Auxiliary 1 Validity (1) | Latched (2), Latch Reset with Ignition (3), | |
| | | 30-Sec. Timed (4) | |
| 13 | Auxiliary 1 Linking None (1) | Arm (2), Disarm (3), Remote Start (4) | |
| 14 | Auxiliary 2 Validity (1) | Latched (2), Latch Reset with Ignition (3), | |
| | | 30-Sec. Timed (4) | |
| 15 | Auxiliary 2 Linking None (1) | Arm (2), Disarm (3), Remote Start (4) | |
| 16 | Auxiliary 3 Validity (1) | Latched (2), Latch Reset with Ignition (3), | |
| | | 30-Sec. Timed (4) | |
| 17 | Auxiliary 3 Linking None (1) | Arm (2), Disarm (3), Remote Start (4) | |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

Factory default settings are indicated in **bold** in the following feature tables.

| Feature | Default LED ON Setting | LED OFF Setting |
|---------|--------------------------------------|--|
| Number | (Press "LOCK" Button) | (Press "UNLOCK" Button) |
| 1 | Engine Checking ON | Engine Checking OFF |
| 2 | Engine Checking Tach | Engine Checking Voltage |
| 3 | Run Time: 12 Min. (1) | Run Time: 24 (2), 60 (3) Min. |
| 4 | Parking Lights Flashing | Parking Lights Constant |
| 5 | Crank Time: 0.6 sec. (1) | 0.8 (2), 1.0 (3), 1.2 (4), 1.4 (5), 1.6 (6), |
| | | 1.8 (7), 2.0 (8), 4.0 (9) |
| 6 | Voltage Checking: High | Voltage Checking: Low |
| 7 | Short Run/Turbo: 1 Min. (1) | 3 (2), 5 (3), 10 (4) Minutes |
| 8 | Activation Pulse Count 1 (1) | Activation Pulse Count 2 (2) |
| 9 | 2nd Ign/Acc Output: Ignition | Accessory |
| 10 | Acc. State During Wait-to-Start: OFF | ON |
| 11 | 2nd Status Output: Normal (1) | Rear Defogger: Latched 10 Min. (2) |
| | | Pulse (3) |
| 12 | Anti-Grind: ON | Anti-Grind: OFF |
| 13 | Diesel Timer Wait-to-Start Input (1) | Timed 15 (2), 30 (3), 45 (4) Seconds |
| 14 | Timer Mode- Timed Starts | Temperature Starts |
| 15 | Run Time: 12 Min. (1) | 3 (2), 6 (3), 9 (4) Minutes |

^{*} NOTE: The numbers in parentheses indicate the number of times the LED will flash.

Valet Mode

To Enter or Exit Valet mode with the Valet/Override Switch:

Procedure:

- 1. Turn the ignition key ON and then OFF
- 2. At anytime during the next 10 seconds, press and release the Valet/Override switch. Now the status LED will glow constantly if you have entered Valet mode, and goes out if you have exited Valet mode.

To Enter or Exit Valet mode with the remote transmitter:

Procedure:

- 1. Open any door.
- 2. Press the "LOCK" button on the transmitter.
- 3. Press the "UNLOCK" button on the transmitter.
- 4. Press the "LOCK" button on the transmitter. Now the status LED will glow constantly if you have entered Valet mode, and goes out if you have exited Valet mode.

Tach Learning

To learn the tach signal:

Procedure:

- 1. Start the vehicle with the key.
- 2. Within 5 seconds, press and HOLD the Valet/Override switch.
- 3. The LED will glow constantly when the tach signal is learned.
- 4. Release the Valet/Override switch and turn off the vehicle.

Timer Mode

Timer mode can only be accomplished when using the "LOCK" and "UNLOCK" buttons the parking lights will flash 4 times and then start the vehicle and run for the set duration. The remote start can be shut off by the transmitter by pressing the remote start button "\mathbf{*}" or the "SIREN" icon button on LCD remote transmitters and remain in timer mode, but if any other shut down zone or the ignition becomes active the timer mode will cancel.

Procedure:

- 1. Press the "LOCK" and "UNLOCK" buttons together.
- 2. The vehicle confirms with 4 parking light flashes.
- 3. A 1-second delay will start.
- 4. The system will start the vehicle and will run for the specified duration, unless shut down by the remote start button "★" or the "SIREN" icon button on LCD remote transmitters. If shut down with the remote start button "★" or the "SIREN" icon button on LCD remote transmitters the system will remain in timer mode.
- 5. The system will start every 3 hours until canceled by the brake, hood, or neutral safety shut-down wires. To exit timer mode, turn the ignition switch on any time the engine is not running. The parking lights will flash 4 times indicating timer mode has been exited.
- 6. The system will start every 3 hours until canceled by the brake, hood, or neutral safety shut-down wires.

Short-Run/Turbo Timer Mode

Short run turbo timer mode keeps the engine running after arriving at your destination for a programmed period of 1, 3, 5, or 10 minutes. This allows the system's timer to conveniently cool down the turbo after you have left the vehicle.

Procedure:

- 1. Park the vehicle and set the parking brake.
- 2. Remove your foot from the brake pedal and leave the engine running.
- 3. Press and release the "*" and "AUX" buttons together at the same time.
- 4. The parking lights will flash to indicate the remote start has entered short run turbo mode.
- 5. Turn off the key, the engine will keep running.
- 6. Exit and secure the vehicle.
- 7. The engine will turn off after the programmed run time.

Remote Start Diagnostics

Procedure:

- 1. With the ignition OFF, press and HOLD the Valet/Override button.
- 2. Turn the ignition ON and then back OFF while HOLDING the Valet/Override button.
- 3. Release the Valet/Override button.
- 4. Press and release the Valet/Override button. The LED will report the last shutdown for one minute or until the ignition is turned ON.

| LED Flashes | Shut Down Mode |
|-------------|---|
| 1 | Timed Out |
| 2 | Over-Rev Shut Down |
| 3 | Low or No RPM |
| 4 | Remote Shut Down (or Optional Push-Button) |
| 6 | (-) Shut Down (Gray Wire) or (+) Shut Down (Brown Wire) |
| 7 | (-) Neutral Safety Switch Shut Down (Black/White Wire) |
| 8 | Wait-to-Start Timed Out |

Security Diagnostics

The system stores the last two full triggers in memory. These are not erasable. Each time the unit sees a full trigger, the older of the two triggers in memory will be replaced by the new trigger.

Procedure:

- 1. With the ignition OFF, press and HOLD the Valet/Override switch.
- 2. Turn on the ignition.
- 3. Release the Valet/Override switch.
- 4. Press and release the Valet/Override switch within 5 seconds. The LED will flash in groups indicating the last two zones that triggered the system. The LED will flash for one minute or until the ignition is turned OFF.

| LED Flashes | Trigger Type |
|-------------|--|
| 1 | Multiplexed Input (Blue Wire) |
| 2 | Multiplexed Shock Sensor Input (Blue Wire) |
| 3 | Door Trigger |
| 4 | Multiplexed Shock Sensor Input (Green Wire) |
| 5 | Ignition Input (Yellow Wire) |
| 6 | Hood Pinswitch (Gray Wire), Brake Pedal (Brown Wire) |

Trouble Shooting

Alarm Troubleshooting

Shock sensor doesn't trigger the alarm:

Has the false alarm prevention circuitry system been triggered? If so, you will hear 5 chirps when disarming the system. To check this, turn the ignition key ON and OFF to clear the false alarm prevention circuity's memory, and then retest the shock sensor.

Door input does not immediately trigger full alarm. Instead, chirps are heard for the first 3 seconds:

That's how progressive two-stage door input works. This is a feature of this system. This is an instant trigger, remember, since even if the door is instantly closed again, the progressive from chirps to constant siren will continue.

Closing the door triggers the system, but opening the door does not:

Have you correctly identified the type of door switch system? This happens often when the wrong door input has been used.

System will not passively arm until it is remotely armed and then disarmed:

Are the door inputs connected? Is the Blue wire connected to the door trigger wire in the vehicle? Either the Green or Violet wire should be used instead.

Door input does not respond with the progressive trigger, but with the immediate full alarm:

Does the status LED indicate that the trigger was caused by the shock sensor? The shock sensor, if set to extremely sensitivity may be detecting the door unlatching before the door switch sends its signal. Reducing the sensitivity can solve this problem.

The Valet/Override switch doesn't work:

Is it plugged into the correct socket?

Status LED doesn't work:

Is it plugged into the correct socket?

Door locks operate backwards:

This unit has easily reversed lock/unlock outputs. Recheck the wire connections to see if you have these reversed.

Remote Start Troubleshooting

The remote start will not activate:

- 1. Check the harnesses and their connections. Make sure that the harnesses are completely plugged in the remote start module. Make sure these are good connections to the vehicle wiring.
- 2. Check the voltage and fuses. Use a meter to check for voltage between the constant wires and ground wire(s). If you have less than battery voltage, check the fuses in the system. Also make sure that the ground wire connects to a good chassis ground point.
- 3. Check diagnostics. The diagnostics will tell you which shut down is active or not connected.

The remote start will activate, but the starter never engages:

- 1. Check for voltage on the Violet starter wire two seconds after the remote start becomes active. If there is voltage present, skip to Step 4. If there is not voltage present, advance to Step 2.
- 2. Check the 30A fuses.
- 3. Check diagnostics. If the Gray/Black wire is detecting ground upon activation, the starter will not crank.
- 4. Make sure the Violet starter wire is connected on the starter side of the optional starter kill/anti-grind relay.
- 5. Does the vehicle have an immobilizer? Some immobilizer systems will not allow the vehicle to crank if active.
- 6. Check connections. The Red heavy gauge input wires on the relay satellite should have solid connections. "T-Taps" or "Scotch Locks" are not recommended for any high current heavy gauge wiring. Also, if the vehicle has more than one 12-volt input wire, then connect one red wire to each.

The vehicle starts, but the starter keeps running:

- 1. Is the system programmed for engine checking OFF or voltage sense? When programmed for either or these features, the engine cranks for the preprogrammed crank time regardless of how long it takes for the vehicle to actually start. Adjust to a lower cranking time.
- 2. Was the Tach learn successful? The LED must light solid and bright to indicate a successful learn.
- 3. Make sure that there is a tach signal at the Purple/White tach input wire on the remote start. If there is not a tach signal, recheck the connection to the vehicle's tach wire and make sure the wire is not broken or shorted to ground leading to the remote start.

The vehicle will start, but will only run for 10 seconds:

- 1. Is the remote start programmed for voltage sense? Try programming the unit for low voltage reference. If this does not work, a tach wire should be used.
- 2. Check diagnostics.

The climate control system does not work during remote start activation:

Either the wrong accessory wire is being energized or more than one ignition or accessory wire must be energized in order to operate the climate control system.

Wiring Quick Reference

K10: Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|--|
| Orange | Ground When Armed (-) 500mA |
| White | (-) Parking Light Output |
| White/Blue | (-) 200mA Channel 3 Validity Output |
| Black/White | (-) 200mA Domelight Supervision Output |
| Green | Not Used |
| Blue | (-) Second Unlock Output |
| Violet | Not Used |
| Black | (-) Chassis Ground |
| Yellow | (+) Ignition Input |
| Brown | (-) Horn Output |
| Red | (+) Constant Power |
| Red/White | (-) 200mA Channel 2 Auxiliary Output |

3-Pin 2-Wire Door Lock Harness

| Wire Color | Function |
|------------|-----------------------------|
| Green | (-) Lock, (+) Unlock Output |
| Empty | |
| Blue | (-) Unlock, (+) Lock Output |

K20: Keyless Entry System

Main Harness

| Wire Color | Function |
|-----------------|--|
| Violet | Unlock #87 Normally Open Input |
| Red/White | (-) Output for Channel 2 |
| Black/Blue | Unlock #30 Common Output |
| Brown/Black | Unlock #87A Normally Closed |
| Violet/Black | Lock #87 Normally Open Input |
| Orange | (-) 500mA Ground-When-Armed Output |
| White/Black | Lock #87 Normally Closed |
| Yellow | (+) Switched Ignition Input |
| Green/Black | Lock #30 Common Output |
| White/Blue | (-) Output for Channel 3 |
| Black/White | Output for Domelight Supervision Relay #30 |
| Lt. Green/Black | (-) Factory Disarm Output |
| Black/White | Input for Domelight Supervision Relay #87 |
| Brown | (-) Horn Honk Output |
| Blue | (-) 200mA 2nd Unlock Output |
| Black | (-) Chassis Ground |
| Red | (+) 12v Constant |
| White | (+/-) Parking Light Flash Output |
| | |

Ports

| White | Status LED |
|-------|-----------------------|
| Blue | Valet/Override Switch |

RK1: Remote Start/Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|--|
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | (-) Activation Input |
| Black/White | (-) 200mA Domelight Supervision Output |
| Green | Not Used |
| Blue | (-) Second Unlock Output |
| Violet | Not Used |
| Black | (-) Chassis Ground |
| | |
| Brown | (-) Horn Output |
| Red | (+) Constant Power |
| Red/White | (-) 200mA Channel 2 Auxiliary Output |

4-Pin Harness

| Wire Color | Function |
|-----------------|--------------------------------------|
| Lt. Green/Black | (-) Factory Alarm Disarm |
| Gray/Black | (-) Wait-to-Start Input |
| Green/White | (-) Factory Alarm Rearm |
| Violet/Black | (-) 200mA Channel 4 Auxiliary Output |

5-Pin Harness

| Wire Color | Function |
|--------------|---|
| Black/White | (-) Neutral Safety Input |
| Violet/White | Tachometer Input |
| Brown | (+) Brake Shutdown Input |
| Gray | (-) Hoodpin Shutdown Input |
| Blue/White | (-) 200mA 2nd Status / Rear Defogger Output |

Relay Satellite

| Wire Color | Function |
|------------|--|
| Purple | (+) Starter Side Starter Wire (Output) |
| Green | (+) Key Side Starter Wire (Input) |
| Red | (+) 12v Constant Input |
| Orange | (+) Accessory Output |
| Red | (+) 12v Constant Input |
| Pink | (+) Ignition Output |
| Red/White | (+) 12v Constant Input |
| Pink/White | (+) 2nd Ignition Output |

4-Pin Harness on Relay Satellite

| Wire Color | Function |
|------------|--------------------------------|
| Pink | (-) 200mA 3rd Ignition Output |
| Violet | (-) 200mA Starter Output |
| Orange | (-) 200mA 2nd Accessory Output |
| Blue | (-) Status Output |

| Wire Color | Function |
|------------|-----------------------------|
| Green | (-) Lock, (+) Unlock Output |
| Empty | |
| Blue | (-) Unlock, (+) Lock Output |

RS10: Remote Start/Keyless Entry System

Main Harness

| Wire Color | Function |
|-----------------|--------------------------------------|
| White | (+/-) Parking Light Output |
| Black | (-) Chassis Ground |
| Red/White | (-) 200mA Channel 2 Auxiliary Output |
| White/Red | (+) Activation Input |
| Gray/Black | (-) Wait-to-Start Input |
| White/Blue | (-) Activation Input |
| Yellow | (+) Ignition Output |
| Green/White | (-) Factory Alarm Rearm |
| Lt. Green/Black | (-) Factory Alarm Disarm |

4-Pin Harness

| Wire Color | Function |
|------------|--------------------------------|
| Pink | (-) 200mA 3rd Ignition Output |
| Violet | (-) 200mA Starter Output |
| Orange | (-) 200mA 2nd Accessory Output |
| Blue | (-) Status Output |

5-Pin Harness

| Wire Color | Function |
|--------------|---|
| Black/White | (-) Neutral Safety Input |
| Violet/White | Tachometer Input |
| Brown | (+) Brake Shutdown Input |
| Gray | (-) Hoodpin Shutdown Input |
| Blue/White | (-) 200mA 2nd Status / Rear Defogger Output |

Relay Satellite

| rtolay catoline | |
|-----------------|-------------------------|
| Wire Color | Function |
| Red | (+) 12v Constant Input |
| Pink | (+) Ignition Output |
| Violet | (+) Starter Output |
| Orange | (+) Accessory Output |
| Red | (+) 12v Constant Input |
| Pink/White | (+) 2nd Ignition Output |

| Wire Color | Eunotion |
|------------|------------|
| wire Color | Function |
| Green | (-) Lock |
| Empty | |
| Blue | (-) Unlock |

RK20: Remote Start/Keyless Entry System

Main Harness

| Wire Color | Function |
|-----------------|--------------------------------------|
| White | (+/-) Parking Light Output |
| Black | (-) Chassis Ground |
| Red/White | (-) 200mA Channel 2 Auxiliary Output |
| Brown | (-) Horn Honk Output |
| Orange | (-) Ground-When-Locked |
| White/Blue | (-) Activation Input |
| Yellow | (+) Ignition Output |
| Green/White | (-) Factory Alarm Rearm |
| Lt. Green/Black | (-) Factory Alarm Disarm |

4-Pin Harness

| <u> </u> | |
|------------|--------------------------------|
| Wire Color | Function |
| Pink | (-) 200mA 3rd Ignition Output |
| Violet | (-) 200mA Starter Output |
| Orange | (-) 200mA 2nd Accessory Output |
| Blue | (-) Status Output |

5-Pin Harness

| Wire Color | Function |
|--------------|---|
| Black/White | (-) Neutral Safety Input |
| Violet/White | Tachometer Input |
| Brown | (+) Brake Shutdown Input |
| Gray | (-) Hoodpin Shutdown Input |
| Blue/White | (-) 200mA 2nd Status / Rear Defogger Output |

Relay Satellite

| Relay Satellite | |
|-----------------|-------------------------|
| Wire Color | Function |
| Red | (+) 12v Constant Input |
| Pink | (+) Ignition Output |
| Violet | (+) Starter Output |
| Orange | (+) Accessory Output |
| Red | (+) 12v Constant Input |
| Pink/White | (+) 2nd Ignition Output |

| O I III Z WIIC DOOI LOOK Harriess | |
|-----------------------------------|------------|
| Wire Color | Function |
| Green | (-) Lock |
| Empty | |
| Blue | (-) Unlock |

S100: Security/Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|--|
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | (-) 200mA Channel 3 Validity Output |
| Black/White | (-) 200mA Domelight Supervision Output |
| Green | (-) Door Trigger Input |
| Blue | (-) Instant Trigger Input |
| Violet | (+) Door Trigger Input |
| Black | (-) Chassis Ground |
| Yellow | (+) Ignition Input |
| Brown | (+) Siren Output |
| Red | (+) Constant Power |
| Red/White | (-) 200mA Channel 2 Auxiliary Output |

3-Pin 2-Wire Door Lock Harness

| Wire Color | Function |
|------------|-----------------------------|
| Green | (-) Lock, (+) Unlock Output |
| Empty | |
| Blue | (-) Unlock, (+) Lock Output |

S400: Security/Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|-------------------------------------|
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | (-) 200mA Channel 3 Validity Output |
| Black/White | Domelight Supervision Output |
| Green | (-) Door Trigger Input |
| Blue | (-) Instant Trigger Input |
| Violet | (+) Door Trigger Input |
| Black | (-) Chassis Ground |
| Yellow | (+) Ignition Input |
| Brown | (+) Siren Output |
| Red | (+) Constant Power |
| Red/White | Channel 2 Auxiliary Output |

8-Pin Harness

| Wire Color | Function |
|--------------|---------------------------------------|
| Violet | Unlock #87 Normally Open (Input) |
| Blue/Black | Unlock #30 Common (Output) |
| Brown/Black | Unlock #87A Normally Closed |
| Violet/Black | Lock #87 Normally Open (Input) |
| Green/Black | Lock #30 Common (Output) |
| White/Black | Lock #87A Normally Closed |
| Black/White | Domelight Supervision Relay Input #87 |
| Red/White | Channel 2 Relay Input #87 |

S660: 2-Way Security/Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|----------------------------------|
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | No Function |
| Black/White | (-) Domelight Supervision Output |
| Green | (-) Door Trigger Input |
| Blue | (-) Instant Trigger Input |
| Violet | (+) Door Trigger Input |
| Black | (-) Chassis Ground |
| Empty | |
| Brown | (+) Siren Output |
| Red | (+) Constant Power |
| Red/White | (-) Channel 2 Auxiliary Output |

7-Pin Harness

| Wire Color | Function |
|------------|-------------------|
| Empty | |
| Yellow | (+)Ignition Input |
| Empty | |

6-Pin Harness

| Wire Color | Function |
|-----------------|----------------------------|
| Lt. Green/Black | (-) Factory Alarm Disarm |
| Gray/Black | No Function |
| Green/White | (-) Factory Alarm Rearm |
| Violet/Black | (-) 200mA Channel 4 Output |
| White/Black | (-) 200mA Channel 5 Output |
| Lt. Blue | (-) 2nd Unlock Output |

| <u> </u> | 0 1 111 2 1111 0 2 0 01 20 01 1 1 1 1 1 | |
|------------|---|--|
| Wire Color | Function | |
| Green | (-) Lock | |
| Empty | | |
| Blue | (-) Unlock | |

S670: 2-Way Security/Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|--------------------------------|
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | (-) Channel 3 Auxiliary Output |
| Black/White | Domelight Supervision Output |
| Green | (-) Door Trigger Input |
| Blue | (-) Instant Trigger Input |
| Violet | (+) Door Trigger Input |
| Black | (-) Chassis Ground |
| Yellow | (+) Ignition Input |
| Brown | (+) Siren Output |
| Red | (+) Constant Power |
| Red/White | (-) Channel 2 Auxiliary Output |

7-Pin Harness

| Wire Color | Function |
|--------------|---|
| Violet | Unlock Relay Normally Open Relay #87 |
| Blue/Black | Unlock Relay Common Relay #30 |
| Brown/Black | Unlock Relay Normally Closed Relay #87A |
| Violet/Black | Lock Relay Normally Open Relay #87 |
| Green/Black | Lock Relay Common Relay #30 |
| White/Black | Lock Relay Normally Closed Relay #87A |
| Black/White | Input to On-Board Domelight Supervision Relay #87 |

3-Pin Harness

| Wire Color | Function |
|--------------|--------------------------------|
| Violet/Black | (-) 200 mA Channel 4 Output |
| Brown/Black | (-) 200mA Horn Honk Output |
| Blue | (-) 200mA Second Unlock Output |

2-Pin Male Terminals

| | - 1 11 11 11 11 11 11 11 11 11 11 11 11 | |
|------------|---|--|
| Wire Color | Function | |
| Terminal | Starter Interrupt Input/Out | |
| Terminal | Starter Interrupt Input/Out | |

SR1000: Remote Start/Security/Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|----------------------------------|
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | (-) Activation Input |
| Black/White | (-) Domelight Supervision Output |
| Green | (-) Door Trigger Input |
| Blue | (-) Instant Trigger Input |
| Violet | (+) Door Trigger Input |
| Black | (-) Chassis Ground |
| Empty | |
| Brown | (+) Siren Output |
| Red | (+) Constant Power |
| Red/White | (-) Channel 2 Auxiliary Output |

SR1000: Remote Start/Security/Keyless Entry System (continued)

5-Pin Harness

| Wire Color | Function |
|--------------|----------------------------------|
| Black/White | (-) Neutral Safety Input |
| Violet/White | Tachometer Input |
| Brown | (+) Brake Shutdown Input |
| Gray | (-) Hoodpin Shutdown Input |
| Blue/White | (-) 200mA Status/Defogger Output |

6-Pin Harness

| Wire Color | Function |
|-----------------|---------------------------------|
| Lt. Green/Black | (-) Factory Alarm Disarm Output |
| Gray/Black | (-) Wait-to-Start Input |
| Green/White | (-) Factory Alarm Rearm Output |
| Violet/Black | (-) 200mA Channel 4 Output |
| White/Black | (-) 200mA Channel 5 Output |
| Lt. Blue | (-) 2nd Unlock Output |

Relay Satellite

| Wire Color | Function |
|------------|--|
| Purple | (+) Starter Side Starter Wire (Output) |
| Green | (+) Key Side Starter Wire (Input) |
| Red | (+) 12v Constant Input |
| Orange | (+) 12v Accessory Output |
| Red | (+) 12v Constant Input |
| Pink | (+) 12v Ignition Output |
| Red/White | (+) 12v Constant Input |
| Pink/White | (+) 12v Ignition 2 Output |

4-Pin Harness on Relay Satellite

| 4-1 III Harriess on Kelay Satellite | |
|-------------------------------------|--------------------------------|
| Wire Color | Function |
| Pink | (-) 200mA 3rd Ignition Output |
| Violet | (-) 200mA 2nd Starter Output |
| Orange | (-) 200mA 2nd Accessory Output |
| Blue | (-) Status Output |

| OT III E WIII O DOOL ECON HAIHOOO | |
|-----------------------------------|-----------------------------|
| Wire Color | Function |
| Green | (-) Lock, (+) Unlock Output |
| Empty | |
| Blue | (-) Unlock, (+) Lock Output |

SR5000: 2-Way Remote Start/Security/Keyless Entry System

Main Harness

| Wire Color | Function |
|-------------|----------------------------------|
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | (-) Activation Input |
| Black/White | (-) Domelight Supervision Output |
| Green | (-) Door Trigger Input |
| Blue | (-) Instant Trigger Input |
| Violet | (+) Door Trigger Input |
| Black | (-) Chassis Ground |
| Empty | |
| Brown | (+) Siren Output |
| Red | (+) Constant Power |
| Red/White | (-) Channel 2 Auxiliary Output |

6-Pin Harness

| <u> </u> | |
|--------------|---|
| Wire Color | Function |
| Blue | (-) 200mA Status/Factory Alarm Rearm Output |
| Blue/Black | (-) 200mA 3rd Ignition Output |
| Gray | (-) Hoodpin Shutdown Input |
| Brown | (+) Brake Switch Shutdown Input |
| Violet/White | Tachometer Input |
| Black/White | (-) Neutral Safety Switch Input |

3-Pin Harness

| Wire Color | Function |
|-----------------|---|
| Gray/Black | (-) Wait-to-Start Input |
| Lt. Green/Black | (-) Factory Disarm/Special Accessory Output |
| Violet/Black | (-) Programmable Channel 4 Output |

Relay Satellite

| Wire Color | Function |
|------------|-----------------------------|
| Red | (+) 12v Constant Input |
| Red | (+) 12v Constant Input |
| Pink | (+) 12v Ignition Output |
| Orange | (+) 12v Accessory Output |
| Purple | (+) 12v Starter Output |
| Pink/White | (+) 12v 2nd Ignition Output |

| Wire Color | Function |
|------------|-----------------------------|
| Green | (-) Lock, (+) Unlock Output |
| Empty | |
| Blue | (-) Unlock, (+) Lock Output |

SR6000, SR7000, SR9000: 2-Way Remote Start/Security/Keyless Entry System Main Harness

| IVIAIII HAIHESS | |
|-----------------|----------------------------------|
| Wire Color | Function |
| Orange | Ground When Armed (-) 500mA |
| White | (+/-) Parking Light Output |
| White/Blue | (-) Activation Input |
| Black/White | (-) Domelight Supervision Output |
| Green | (-) Door Trigger Input |
| Blue | (-) Instant Trigger Input |
| Violet | (+) Door Trigger Input |
| Black | (-) Chassis Ground |
| Empty | |
| Brown | (+) Siren Output |
| Red | (+) Constant Power |
| Red/White | (-) Channel 2 Auxiliary Output |

6-Pin Harness

| Wire Color | Function |
|-----------------|----------------------------|
| Lt. Green/Black | (-) Factory Alarm Disarm |
| Gray/Black | (-) Wait-to-Start Input |
| Green/White | (-) Factory Alarm Rearm |
| Violet/Black | (-) 200mA Channel 4 Output |
| White/Black | (-) 200mA Channel 5 Output |
| Lt. Blue | (-) 2nd Unlock Output |

5-Pin Harness

| Wire Color | Function |
|--------------|---|
| Black/White | (-) Neutral Safety Input |
| Violet/White | Tachometer Input |
| Brown | (+) Brake Shutdown Input |
| Gray | (-) Hoodpin Shutdown Input |
| Blue/White | (-) 200mA 2nd Status/Rear Defogger Output |

2-Pin Harness

| <u> </u> | |
|--------------|----------------------------|
| Wire Color | Function |
| Orange/Black | (-) 200mA Channel 6 Output |
| Brown | (-) 200mA Horn Output |

Relay Satellite

| Trolay Garonico | |
|-----------------|--|
| Wire Color | Function |
| Purple | (+) Starter Side Starter Wire (Output) |
| Green | (+) Key Side Starter Wire (Input) |
| Red | (+) 12v Constant Input |
| Orange | (+) 12v Accessory Output |
| Red | (+) 12v Constant Input |
| Pink | (+) 12v Ignition Output |
| Red/White | (+) 12v Constant Input |
| Pink/White | (+) 12v 2nd Ignition Output |

SR6000, SR7000, SR9000: 2-Way Remote Start/Security/Keyless Entry System

4-Pin Harness on Realy Satellite

| Wire Color | Function |
|------------|--------------------------------|
| Pink | (-) 200mA 3rd Ignition Output |
| Violet | (-) 200mA 2nd Starter Output |
| Orange | (-) 200mA 2nd Accessory Output |
| Blue | (-) Status Output |

| Wire Color | Function |
|------------|-----------------------------|
| Green | (-) Lock, (+) Unlock Output |
| Empty | |
| Blue | (-) Unlock, (+) Lock Output |